

Potentilla newberryi Gray

Newberry cinquefoil
Rosaceae (Rose Family)

Status: State Possibly Extirpated

Rank: G3G4SH

General Description: Adapted from Hitchcock et al. (1961): *Potentilla newberryi* is a short-lived, tap-rooted perennial that is leafy throughout, 2 to 20 in. (5-50.8 cm) long, sprawling or ascending to erect, grayish-silky to coarsely pubescent. The 5-21 leaflets are crowded and pinnately dissected into 3 to 9 linear to spatulate segments that are 1/8 to 1/4 in. (3-7 mm) long. The inflorescence is usually freely branched and subtended by leafy bracts; the foliage usually hides the fragrant flowers. The calyx is shallowly bowl shaped. The sepals are lanceolate, spreading, and 1/8 to 1/4 in. (3-6 mm) long. The petals are 1/8 to 1/4 in. (4-6 mm) long, spreading, cream or white colored, rounded and sometimes notched at the apex, and tapering to the point of attachment. There are many stamens and numerous pistils. The style is inserted almost at the tip of the ovary, and is elongate and tapering from a glandular-roughened base. The many mature achenes (dry fruits) are strongly reticulate, brownish and about 1/16 in. (1.3 mm) long.

Identification Tips: Within its historical range in Klickitat County, *Potentilla newberryi* might be most easily confused with *P. paradoxa*, but can be distinguished by the following. The leaflets of *P. newberryi* are divided into segments that are less than 1/2 in. (1 cm) long and the petals are cream or white colored, while the leaflets of *P. paradoxa* are divided into segments that are 1/2 to 2 in. (1-5 cm) long, and the petals are yellow. Both species can be found along shorelines.

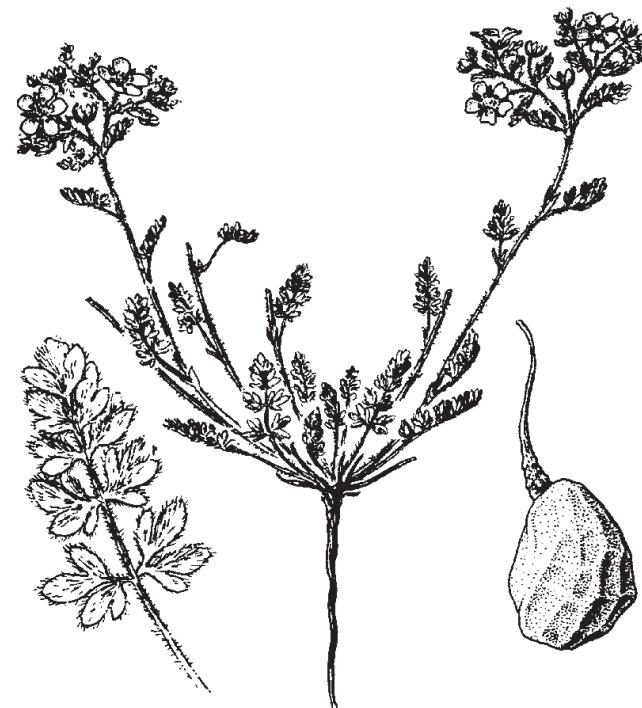
Phenology: Within its range this species is identifiable from April to July. In Washington it was observed in June.

Range: This species is distributed from south-central Oregon to northern California and Nevada. It is known in Washington from one disjunct historical collection in Klickitat County.

Habitat: *Potentilla newberryi* was found on a receding shoreline of the Columbia River at 70 feet (21 m) elevation. No associated species have been documented.

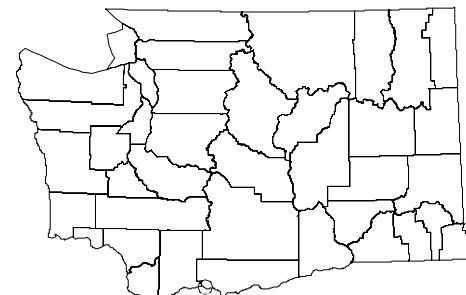
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Illustration by Jeanne R. Janish

Known distribution
of *Potentilla newberryi*
in Washington



- Current (1980+)
- Historic (older than 1980)

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Paul Slichter



Don Eastman

Potentilla newberryi

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Ecology: This species occurs almost always in wetlands where there is some seasonal drying, such as dry lakeshores, vernal pools, water holes, and river shorelines.

State Status Comments: In Washington *Potentilla newberryi* is known from two historical records in Klickitat County (one from Bingen, and a now missing collection from Wallula Gap). The historical occurrence sites are now flooded in dam reservoirs, plus upland habitats are developed and badly invaded by weeds, so this plant probably no longer grows there (Bjork 2002).

Inventory Needs: Receding shorelines of rivers in Klickitat County should be systematically surveyed for possible populations. Surveys for this species in Klickitat County in 2002 were unsuccessful.

Threats and Management Concerns: The Columbia River mudflats that were historically extensive are now either submerged by reservoir waters or exposed at the wrong time of year and too briefly for the development of communities of plants dependent on receding shorelines. This may have been the reason that this species has not been re-found in Washington. (Bjork 2002)

References:

Bjork, Curtis. 2002. Recommended status change for *Potentilla newberryi*. Unpublished. On file with the WNHP.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.